

# IDEAS AT *Work*

## COMPUTERS/HILLEL SEGAL

### Tips on disk handling can prevent data loss

One of the most serious and potentially expensive problems facing businesses that use personal computers is lost data. This commonly happens if the computer's disks get damaged or accidentally erased.

It's a problem because almost everyone involved is unaware of the risks. Unfortunately, most people don't realize until too late how easy it is to lose data, and how much time and trouble is involved to restore it — either by rekeying every item one by one or engaging an expert to try to read the damaged or erased disks.

For the last few weeks in this column, I've discussed how to prevent and handle some of these situations. I recommended that businesses use the diskettes offered by the Polaroid Corp. because of the firm's guarantee to restore lost data from its brand diskettes. And for those who lose data from other kinds of diskettes, hard disks and tapes, a similar service is offered by Data Protection Services of Tulsa, Okla.

Everyone who's been burned at least once knows the importance of backups, and can attest to the wisdom of storing copies of programs and data off-site on a periodic basis.

This week, I'll provide three more important ways to protect your data, as described to me by experts in the field of data recovery.

The first is simple and obvious, but easy to overlook. The second is a bit less obvious — and could prevent you from using your backups in case your original data is lost. And the third everyone says will never happen to them — until it does.

So read on — these are the kind of actions that are easy to take after you learn about them. But if you don't, you're destined to learn from your own mistakes, instead of the mistakes of others.

**Tip #1.** Don't ignore strange noises or error messages relating

When this happens, don't automatically "save" the file you are currently working on in your normal way. If you do, a damaged version might cover up an undamaged previous copy, and your problem will get worse. Too often, worried users will repeatedly try to save their files, just aggravating the situation.

The safest action is to save your current work under a new name, on a different disk. Hopefully, one of the two will be legible by an expert later.

**Tip #2.** Be very sensitive to the temperature of your floppy disks.

If you're like many people, you keep your "off-site" file backups in the trunk of your car. It's a convenient place, since you don't have to drive across town to get them in case of an emergency. And since they are off-site, they are protected in case your entire computer system is stolen or destroyed by fire.

The major trouble with this procedure is *NOT* that your backup disks will be repeatedly baked in the summer and frozen in the winter. This will not be a problem unless the baking causes warping — which usually will not occur in the car's trunk (as opposed to the dashboard where warping can easily occur).

The less obvious problem occurs when disks or tapes stored in the car are removed and immediately placed in your computer's disk drive. The heat or cold has caused them to temporarily expand or contract. They will appear to work just fine, for example, if you are performing a backup from your hard disk to the floppies.

But later, when you might desperately need to read the backup files from the floppies, they won't read! The alignment of the tracks on the disk with the read-head in the drive has changed as the disks returned to room temperature.

The answer, in this case, is simply to let your disks stabilize at room temperature before *any* use. An hour is a safe amount of time.



Segal

to your disk drive. You are probably already aware of the normal noises made by your disk drive whenever it's active. If it starts making unusual grunting or whining sounds, that's something to be very concerned about.

Similarly, if you get error messages like "Disk Write Error," you could be in for trouble.

The first inclination of inexperienced users is to ignore the warning signs and hope the problem will go away. That's the worst thing to do.

It's telling you that damage has already occurred, damage is occurring at that very moment, or damage is about to occur. Worst, a whining noise might mean all three.

All that is a safe assumption. If the backups are made at room temperature and the restoration is attempted at the same temperature, no problem should occur. It does not matter if the disks were baked or frozen in between.

**Tip #3.** Finally, never, never, never format disks when you are in a hurry, under pressure or otherwise aggravated. It's in times like these that you get mixed up and reformat the wrong one. The simple command "Format b:" becomes "Format c:" and you've destroyed valuable data instead of prepared a new disk to receive your data. Worst, there is no procedure available, from Polaroid or any expert I've talked with, to recover data lost in this manner.

---

*Hillel Segal is an independent computer consultant who specializes in helping businesses select and use personal computers hardware and software. He can be reached at the Personal Computer Managers Association, P.O. Box 9003, Boulder 80301.*